

Science and Technology Goals/Objectives for the FY 2011 Performance Evaluation of UT-Battelle, LLC for Management and Operation of the Oak Ridge National Laboratory

GOAL 1.0 Provide for Efficient and Effective Mission Accomplishment

The science and technology programs at the Laboratory produce high-quality, original, and creative results that advance science and technology; demonstrate sustained scientific progress and impact; receive appropriate external recognition of accomplishments; and contribute to overall research and development goals of the Department and its customers.

The Provide for Efficient and Effective Mission Accomplishment Goal measures the overall effectiveness and performance of the Contractor in delivering science and technology results which contribute to and enhance the DOE's mission of protecting our national and economic security by providing world-class scientific research capacity and advancing scientific knowledge by supporting world-class, peer-reviewed scientific results, which are recognized by others.

Objectives

1.1 Provide Science and Technology Results with Meaningful Impact on the Field

In assessing the performance of the Laboratory against this Objective, the following assessment elements should be considered:

- Performance of the Laboratory with respect to proposed research plans;
- Performance of the Laboratory with respect to community impact and peer review; and
- Performance of the Laboratory with respect to impact to DOE mission needs.

The following is a sampling of factors to be considered in determining the level of performance for the Laboratory against this Objective. The evaluator(s) may consider the following as measured through progress reports, peer reviews, Field Work Proposals (FWPs), Program Office reviews/oversight, etc.

- Impact of publications on the field, as measured primarily by peer review;
- Impact of S&T results on the field, as measured primarily by peer review;
- Impact of S&T results outside the field indicating broader interest;
- Impact of S&T results on DOE or other customer mission(s);
- Successful stewardship of mission-relevant research areas;
- Delivery on proposed S&T plans;
- Significant awards (Nobel Prizes, R&D 100, FLC, etc.);
- Invited talks, citations, making high-quality data available to the scientific community; and
- Development of tools and techniques that become standards or widely-used in the scientific community.

Score	4.3- 4.1	4.0- 3.8	3.7- 3.5	3.4- 3.1	3.0- 2.8	2.7- 2.5	2.4- 2.1	2.0- 1.8	1.7- 1.1	1.0-0.8	0.7-0
Grade	A+	A	A-	B+	B	B-	C+	C	C-	D	F

Letter Grade	Definition
A+	<p>In addition to satisfying the conditions for B+</p> <ul style="list-style-type: none"> There are <i>significant research areas</i> for which the Laboratory has exceeded the expectations of the proposed research plans <i>in significant ways through creative, new, or unconventional methods that allow greater scientific reach than expected.</i> S&T conducted at the Laboratory <i>has resolved one of the most critical questions in the field, or has changed the way the research community thinks about a particular field through paradigm shifting discoveries that would be considered the most influential discovery of the decade for that field.</i> S&T conducted at the Laboratory <i>provided major advances that significantly accelerate DOE or other customer mission(s).</i>
A	<p>In addition to satisfying the conditions for B+</p> <ul style="list-style-type: none"> There are <i>important examples</i> where the Laboratory <i>exceeded the expectations</i> of the proposed research plans <i>in significant ways through creative, new, or unconventional methods that allow greater scientific reach than expected.</i> <i>All areas</i> of S&T conducted at the Laboratory are of <i>exceptional or outstanding</i> merit and quality. S&T conducted at the Laboratory has <i>significant positive impact</i> to DOE or other customer missions.
A-	<p>In addition to satisfying the conditions for B+</p> <ul style="list-style-type: none"> There are <i>important examples</i> where the Laboratory <i>exceeded the expectations</i> of the proposed research plans. <i>Significant areas</i> of S&T conducted at the Laboratory are of <i>exceptional or outstanding</i> merit and quality. S&T conducted at the Laboratory <i>significantly impact</i> DOE or other customer missions.
B+	<p>The Laboratory has achieved each of the following objectives:</p> <ul style="list-style-type: none"> The Laboratory has successfully executed proposed research plans. S&T conducted at the Laboratory are of <i>high</i> scientific merit and quality S&T conducted at the Laboratory <i>advance</i> DOE or other customer missions.
B	<ul style="list-style-type: none"> The Laboratory has successfully executed proposed research plans. S&T conducted at the Laboratory <i>advance</i> DOE or other customer missions. <p>BUT the Laboratory fails to meet the conditions for B+ for <i>at least one</i> of the following reasons:</p> <ul style="list-style-type: none"> S&T conducted at the Laboratory are <i>not uniformly of high</i> merit and quality OR <i>some areas of research, previously supported, have become uncompetitive</i> OR <i>the Laboratory does not produce sufficiently competitive proposals to receive program support at a level commensurate with its unique capabilities.</i>
B-	<p>The Laboratory fails to meet the conditions for B+ for <i>at least one</i> of the following reasons:</p> <ul style="list-style-type: none"> The Laboratory has <i>failed to successfully execute</i> proposed research plans <i>but contingencies were in place such that no funding was or will be terminated.</i> OR S&T conducted at the Laboratory <i>does little to advance</i> DOE or other customer missions. <i>Significant areas</i> of S&T conducted at the Laboratory are <i>not of high</i> merit and quality OR <i>some areas of research, previously supported, have become uncompetitive</i> OR <i>the Laboratory do not produce sufficiently competitive proposals to receive program support at a level commensurate with its unique capabilities.</i>

Letter Grade	Definition
C	<p>The Laboratory fails to meet the conditions for B+ for <i>at least one</i> of the following reasons:</p> <ul style="list-style-type: none"> • <i>In several significant aspects, the Laboratory failed to deliver on proposed research plans using available resources such that some funding was or will be terminated OR S&T conducted at the Laboratory failed to contribute to DOE or other customer missions</i> • <i>Significant areas of S&T conducted at the Laboratory are of poor merit and quality OR some areas of research, previously supported, have become uncompetitive AND the Laboratory does not produce sufficiently competitive proposals to receive program support at a level commensurate with its unique capabilities.</i>
D	<p>The Laboratory fails to meet the conditions for B+ for <i>at least one</i> of the following reasons:</p> <ul style="list-style-type: none"> • <i>Multiple program elements at the Laboratory failed to deliver on proposed research plans using available resources such that significant funding was or will be terminated.</i> • <i>Multiple significant areas of S&T conducted at the Laboratory are of poor merit and quality OR some areas of research, previously supported, have become uncompetitive AND the Laboratory does not produce sufficiently competitive proposals to receive program support at a level commensurate with its unique capabilities.</i> • <i>S&T conducted at the Laboratory failed to contribute to DOE or other customer missions.</i>
F	<p>The Laboratory fails to meet the conditions for B+ for <i>at least one</i> of the following reasons:</p> <ul style="list-style-type: none"> • <i>Multiple program elements at the Laboratory failed to deliver on proposed research plans using available resources resulting in total termination of funding.</i> • <i>Multiple significant areas of S&T conducted at the Laboratory are of poor merit and quality OR some areas of research, previously supported, have become uncompetitive AND the Laboratory does not produce sufficiently competitive proposals to receive program support at a level commensurate with its unique capabilities OR the Laboratory has been found to have engaged in gross scientific incompetence and/or scientific fraud.</i> • <i>S&T conducted at the Laboratory failed to contribute to DOE or other customer missions.</i>

1.2 Provide Quality Leadership in Science and Technology that Advances Community Goals and DOE Mission Goals.

In assessing the performance of the Laboratory against this Objective, the following assessment elements should be considered:

- Innovativeness / Novelty of research ideas put forward by the Laboratory;
- Extent to which Laboratory staff members take on substantive or formal leadership roles in their community;
- Extent to which Laboratory staff members take on formal leadership roles in DOE and SC activities; and
- Extent to which Laboratory staff members contribute thoughtful and thorough peer reviews and other research assessments as requested by DOE and SC.

The following is a sampling of factors to be considered in determining the level of performance for the Laboratory against this Objective. The evaluator(s) may consider the following as measured through progress reports, peer reviews, Field Work Proposals (FWPs), Program Office reviews/oversight, etc.:

- Willingness to pursue novel approaches and/or demonstration of innovative solutions to problems;
- Willingness to take on high-risk/high payoff/long-term research problems, evidence that previous risky decisions by the PI/research staff have proved to be correct and are paying off;
- The uniqueness and challenge of science pursued, recognition for doing the best work in the field;
- Extent and quality of collaborative efforts;
- Staff members visible in leadership positions in the scientific community;
- Involvement in professional organizations, National Academies panels and workshops,
- Effectiveness in driving the direction and setting the priorities of the community in a research field; and
- Success in competition for resources.

Score	4.3-4.1	4.0-3.8	3.7-3.5	3.4-3.1	3.0-2.8	2.7-2.5	2.4-2.1	2.0-1.8	1.7-1.1	1.0-0.8	0.7-0
Grade	A+	A	A-	B+	B	B-	C+	C	C-	D	F

Letter Grade	Definition
A+	<p>In addition to satisfying the conditions for B+, the following conditions hold for ALL Laboratory staff:</p> <ul style="list-style-type: none"> • Laboratory staff members have <i>leadership positions</i> in professional organizations AND <i>in National Academy or equivalent panels to discuss and determine further research directions</i>; • Laboratory staff members have <i>leadership positions</i> in DOE sponsored workshops and strategic planning activities, for example, Laboratory staff members chair or co-chair DOE-sponsored workshops and strategic planning activities. • The Laboratory program consistently produces and submits competitive proposals that challenge convention and open <i>significant new fields</i> for research that are well aligned with DOE mission needs and <i>the Laboratory has a strong recognized role in setting priorities and driving the direction in key research areas and are internationally recognized leaders in the field</i>. • Laboratory staff hold <i>leadership positions</i> in multi-institutional research collaborations.
A	<p>In addition to satisfying the conditions for B+</p> <ul style="list-style-type: none"> • Laboratory staff members have <i>leadership positions</i> in professional organizations AND <i>staff has contributing role in National Academy or equivalent panels to discuss further research directions</i>; • Laboratory staff members have <i>leadership positions</i> in DOE sponsored workshops and strategic planning activities. • The Laboratory program consistently produces and submits competitive proposals that challenge convention and open <i>significant new fields</i> for research that are well aligned with DOE mission needs and <i>the Laboratory has a strong recognized role in setting priorities and driving the direction in key research areas</i>. • Laboratory staff hold <i>leadership positions</i> in multi-institutional research collaborations.

Letter Grade	Definition
A-	<p>In addition to satisfying the conditions for B+</p> <ul style="list-style-type: none"> Laboratory staff members have <i>leadership positions</i> in professional organizations OR <i>staff has contributing role in National Academy or equivalent panels to discuss further research directions</i>; Laboratory staff members have <i>leadership positions</i> in DOE sponsored workshops and strategic planning activities. The Laboratory program consistently submits competitive proposals that challenge convention and open <i>significant</i> new avenues for research that are well aligned with DOE mission needs. Laboratory staff hold <i>leadership positions</i> in multi-institutional research collaborations.
B ⁺	<p>The Laboratory has achieved each of the following objectives:</p> <ul style="list-style-type: none"> Laboratory staff members are <i>active participants</i> in professional organizations, committees, and activities, and take on leadership responsibilities commensurate with experience and expertise. Laboratory staff members are <i>active participants</i> in DOE sponsored workshops and strategic planning activities. Laboratory staff members contribute thoughtful and thorough peer review in a timely manner, when requested by DOE. The Laboratory program consistently provides competitive proposals that challenge convention and open new avenues for research that are well aligned with DOE mission needs. Laboratory staff are <i>active participants</i> in multi-institutional research collaborations
B	<ul style="list-style-type: none"> Laboratory staff members contribute thoughtful and thorough peer review in a timely manner, when requested by DOE. The Laboratory program consistently provides competitive proposals that challenge convention and open new avenues for research that are well aligned with DOE mission needs. <p>BUT the Laboratory fails to meet the conditions for B+ for <i>at least one</i> of the following reasons:</p> <ul style="list-style-type: none"> Although <i>regular participants</i> in professional organizations, committees, and activities, <i>the extent to which staff take on leadership roles falls short of what would be expected, given the level of experience and expertise of the staff.</i> Although <i>regular participants</i> in DOE sponsored workshops and strategic planning activities, <i>the extent to which staff take on leadership roles falls short of what would be expected, given the level of experience and expertise of the staff.</i> Although <i>active members</i> of multi-institutional research collaborations, <i>the extent to which staff take on leadership roles falls short of what would be expected, given the level of experience and expertise of the staff.</i>

Letter Grade	Definition
B-	<ul style="list-style-type: none"> Laboratory staff members contribute thoughtful and thorough peer review in a timely manner, when requested by DOE. <p>BUT the Laboratory fails to meet the conditions for B+ for <i>at least one</i> of the following reasons:</p> <ul style="list-style-type: none"> The Laboratory program submits competitive proposals <i>but these either lack innovation or are not well aligned with DOE mission needs.</i> Laboratory staff are <i>infrequent participants</i> in professional organizations, committees, and activities, and <i>the extent to which staff take on leadership roles falls short of what would be expected, given the level of experience and expertise of the staff.</i> Laboratory staff are <i>infrequent participants</i> in DOE sponsored workshops and strategic planning activities, and <i>the extent to which staff take on leadership roles falls short of what would be expected, given the level of experience and expertise of the staff.</i> Although <i>active members</i> of multi-institutional research collaborations, <i>the extent to which staff take on leadership roles falls short of what would be expected, given the level of experience and expertise of the staff.</i>
C	<p>The Laboratory fails to meet the conditions for B+ for <i>at least one</i> of the following reasons:</p> <ul style="list-style-type: none"> Laboratory staff members <i>do not reliably</i> contribute thoughtful and thorough peer review in a timely manner, when requested by DOE. <i>Some areas of research, previously supported, are no longer competitive.</i> Laboratory staff members are <i>infrequent participants</i> in professional organizations, committees, and activities, AND <i>the extent to which staff take on leadership roles falls short of what would be expected, given the level of experience and expertise of the staff.</i> Laboratory staff members are <i>infrequent participants</i> in DOE sponsored workshops and strategic planning activities, and <i>the extent to which staff take on leadership roles falls short of what would be expected, given the level of experience and expertise of the staff.</i> Although Laboratory staff members are <i>active members</i> of multi-institutional research collaborations, <i>the extent to which staff take on leadership roles falls short of what would be expected, given the level of experience and expertise of the staff.</i>
D	<p>The Laboratory fails to meet the conditions for B+ because <i>the Laboratory staff are working on problems that are no longer at the forefront of science and are considered mundane.</i></p>
F	<p>Review has found the Laboratory staff to be <i>guilty of gross scientific incompetence and/or scientific fraud.</i></p>

GOAL 2.0 Provide for Efficient and Effective Design, Fabrication, Construction and Operations of Research Facilities

The Laboratory provides effective and efficient strategic planning; fabrication, construction and/or operations of Laboratory research facilities; and are responsive to the user community.

The Provide for Efficient and Effective Design, Fabrication, Construction and Operations of Research Facilities Goal shall measure the overall effectiveness and performance of the Contractor in planning for and delivering leading-edge specialty research and/or user facilities to ensure the required capabilities are present to meet today's and tomorrow's complex challenges. It also measures the Contractor's innovative operational and programmatic means for implementation of systems that ensures the availability, reliability, and efficiency of these facilities; and the appropriate balance between R&D and user support.

Objectives

2.1 Provide Effective Facility Design(s) as Required to Support Laboratory Programs (i.e., activities leading up to CD-2)

In assessing the performance of the Laboratory against this Objective, the following assessment elements should be considered:

- The Laboratory's delivery of accurate and timely information required to carry out the critical decision and budget formulation process;
- The Laboratory's ability to meet the intent of DOE Order 413.3, Program and Project Management for the Acquisition of Capital Assets;
- The extent to which the Laboratory appropriately assesses risks and contingency needs; and
- The extent to which the Laboratory is effective in its unique management role and partnership with HQ.

The following is a sampling of factors to be considered in determining the level of performance for the Laboratory against this Objective. The evaluator(s) may consider the following as measured through progress reports, peer reviews, Field Work Proposals (FWPs), Program Office reviews/oversight, etc.

- The quality of the scientific justification for proposed facilities resulting from preconceptual R&D;
- The technical quality of conceptual and preliminary designs and the credibility of the associated cost estimates
- The credibility of plans for the full life cycle of proposed facilities including financing options;
- The leveraging of existing facilities and capabilities of the DOE Laboratory complex in plans for proposed facilities; and
- The novelty and potential impact of new technologies embodied in proposed facilities.

Score	4.3-4.1	4.0-3.8	3.7-3.5	3.4-3.1	3.0-2.8	2.7-2.5	2.4-2.1	2.0-1.8	1.7-1.1	1.0-0.8	0.7-0
Grade	A+	A	A-	B+	B	B-	C+	C	C-	D	F

Letter Grade	Definition
A+	<p>In addition to satisfying all conditions for B+; the Laboratory <i>exceeds expectations</i> in <i>all</i> of these categories:</p> <ul style="list-style-type: none"> • The Laboratory is recognized by the research community as the leader for making the science case for the acquisition; • The Laboratory takes the initiative to demonstrate and thoroughly document the potential for transformational scientific advancement. • Approaches proposed by the Laboratory are widely regarded as innovative, novel, comprehensive, and potentially cost-effective. • Reviews repeatedly confirm strong potential for scientific discovery in areas that support the Department's mission, and potential to change a discipline or research area's direction. • The Laboratory identifies, analyzes and champions novel approaches for acquiring the new capability, including leveraging or extending the capability of existing facilities and financing and these efforts result in significant cost estimate and/or risk reductions without loss or, or while enhancing capability.
A	<p>In addition to satisfying all conditions for B+, <i>all</i> of the following conditions are also met:</p> <ul style="list-style-type: none"> • The Laboratory is recognized by the research community as a leader for making the science case for the acquisition; • The Laboratory takes the initiative to demonstrate the potential for revolutionary scientific advancement working in partnership with HQ • The Laboratory identifies, analyzes, and champions, to HQ and Site office, novel approaches for acquiring the new capability, including leveraging or extending the capability of existing facilities and financing.
A-	<p>In addition to satisfying all conditions for B+, <i>all</i> of the following conditions are also met:</p> <ul style="list-style-type: none"> • The approaches proposed by the Laboratory are widely regarded as innovative, novel, comprehensive, and potentially cost-effective • Reviews repeatedly confirm potential for scientific discovery in areas that support the Department's mission, and potential to change a discipline or research area's direction.
B+	<p>The Laboratory has achieved each of the following objectives:</p> <ul style="list-style-type: none"> • The Laboratory displays leadership and commitment in the development of quality analyses, preliminary designs, and related documentation to support the approval of the mission need (CD-0), the alternative selection and cost range (CD-1) and the performance baseline (CD-2). • Documentation requested by the programs is provided in a timely and thorough manner. • The Laboratory keeps DOE appraised of the status, near-term plans and the resolution of problems on a regular basis; anticipates emerging issues that could impact plans and takes the initiative to inform DOE of possible consequences. • The Laboratory solves problems and addresses issues to avoid adverse impacts to the project.
B	The Laboratory fails to meet expectations in one of the areas listed under B+.
B-	The Laboratory fails to meet expectations in several of the areas listed under B+
C	The Laboratory fails to meet the expectations in several of the areas listed under B+ AND the required analyses and documentation developed by the Laboratory are EITHER not innovative, OR reflect a lack of commitment and leadership.

Letter Grade	Definition
D	The Laboratory fails to meet the expectations in several of the areas listed under B+ AND the Laboratory fails to provide a compelling justification for the acquisition.
F	The Laboratory fails to meet the expectations in several of the areas listed under B+ AND the approaches proposed by the Laboratory are based on fraudulent assumptions; the science case is weak to non-existent, and the business case is seriously flawed.

2.2 Provide for the Effective and Efficient Construction of Facilities and/or Fabrication of Components (execution phase, post CD-2 to CD-4)

In assessing the performance of the Laboratory against this Objective, the following assessment elements should be considered:

- The Laboratory's adherence to DOE Order 413.3 Project Management for the Acquisition of Capital Assets;
- Successful fabrication of facility components by the Laboratory;
- The Laboratory's effectiveness in meeting construction schedule and budget;
- The quality of key Laboratory staff overseeing the project(s); and
- The extent to which the Laboratory maintains open, effective, and timely communication with HQ regarding issues and risks.

Score	4.3-4.1	4.0-3.8	3.7-3.5	3.4-3.1	3.0-2.8	2.7-2.5	2.4-2.1	2.0-1.8	1.7-1.1	1.0-0.8	0.7-0
Grade	A+	A	A-	B+	B	B-	C+	C	C-	D	F

Letter Grade	Definition
A+	In addition to satisfying all conditions for A, <ul style="list-style-type: none"> • There is high confidence throughout the execution phase that the project will be completed <i>significantly</i> under budget and/or ahead of schedule while meeting or exceeding all performance baselines;
A	In addition to satisfying all conditions for B+, <ul style="list-style-type: none"> • The Laboratory has identified and implemented practices that would allow the project scope to be <i>significantly expanded</i> if such were desirable, without impact on baseline cost or schedule; • The Laboratory <i>always</i> provides <i>exemplary</i> project status reports on time to DOE and takes the initiative to communicate emerging problems or issues. • Reviews identify environment, safety and health practices to be <i>exemplary</i>. • There is high confidence throughout the execution phase that the project will meet its cost/schedule performance baseline;

Letter Grade	Definition
A-	<p>In addition to satisfying all conditions for B+,</p> <ul style="list-style-type: none"> The Laboratory has identified practices that would allow for the project scope to be expanded if such were desirable, without impact on baseline cost or schedule; Problems are identified and corrected by the Laboratory promptly, with no impact on scope, cost or schedule The Laboratory provides <i>particularly useful</i> project status reports on time to DOE and regularly takes the initiative to communicate emerging problems or issues. Reviews identify environment, safety and health practices to <i>exceed expectations</i>. There is high confidence throughout the execution phase that the project will meet its cost/schedule performance baseline;
B+	<p>The Laboratory has achieved each of the following objectives</p> <ul style="list-style-type: none"> The project meets CD-2 performance measures; The Laboratory provides sustained leadership and commitment to environment, safety and health; Reviews regularly recognize the Laboratory for being proactive in the management of the execution phase of the project; To a large extent, problems are identified and corrected by the Laboratory with little, or no impact on scope, cost or schedule; DOE is kept informed of project status on a regular basis; reviews regularly indicate project is expected to meet its cost/schedule performance baseline.
B	<p>The Laboratory provides sustained leadership and commitment to environment, safety and health BUT</p> <ul style="list-style-type: none"> The project fails to meet expectations in <i>one</i> of the remaining areas listed under B+.
B-	<p>The Laboratory provides sustained leadership and commitment to environment, safety and health BUT</p> <ul style="list-style-type: none"> The project fails to meet expectations in <i>several</i> of the areas listed under B+
C	<p>The Laboratory provides sustained leadership and commitment to environment, safety and health BUT</p> <p>The project fails to meet expectations in <i>several</i> of the areas listed under B+</p> <p>AND</p> <ul style="list-style-type: none"> Reviews indicate project remains at risk of breaching its cost/schedule performance baseline; Reports to DOE can vary in degree of completeness
D	<p>The project fails to meet conditions for B+ in at least one of the following areas:</p> <ul style="list-style-type: none"> Reviews indicate project is likely to breach its cost/schedule performance baseline; Laboratory commitment to environment, safety and health issues is inadequate; Reports to DOE are largely incomplete; Laboratory commitment to the project has subsided.
F	<p>The project fails to meet conditions for B+ in at least one of the following areas:</p> <ul style="list-style-type: none"> Laboratory falsifies data during project execution phase; Shows disdain for executing the project within minimal standards for environment, safety or health, Fails to keep DOE informed of project status; Recent reviews indicate that the project is expected to breach its cost/schedule performance baseline.

2.3 Provide Efficient and Effective Operation of Facilities

In assessing the performance of the Laboratory against this Objective, the following assessment elements should be considered:

- The availability, reliability, performance, and efficiency of Laboratory facility(ies);
- The degree to which the facility is optimally arranged to support the user community;
- The extent to which Laboratory R&D is conducted to develop/expand the capabilities of the facility(ies);
- The Laboratory's effectiveness in balancing resources between facility R&D and user support; and
- The quality of the process used to allocate facility time to users.
-

Score	4.3-4.1	4.0-3.8	3.7-3.5	3.4-3.1	3.0-2.8	2.7-2.5	2.4-2.1	2.0-1.8	1.7-1.1	1.0-0.8	0.7-0
Grade	A+	A	A-	B+	B	B-	C+	C	C-	D	F

Letter Grade	Definition
A+	<p>In addition to satisfying all conditions for B+; <i>all</i> of the following conditions are also met</p> <ul style="list-style-type: none"> • Performance of the facility <i>exceeds</i> expectations as defined before the start of the year in all of these categories: cost of operations, users served, availability, and capability; • The schedule and the costs associated with the ramp-up to steady state operations are <i>significantly less</i> than planned and are acknowledged to be 'leadership caliber' by reviews; • Data on environment, safety, and health continues to be exemplary and widely regarded as among the 'best in class' • The Laboratory took extraordinary means to deliver an extraordinary result for the users and the program in the performance/ review period.
A	<p>In addition to satisfying all conditions for B+; <i>all</i> of the following conditions are also met</p> <ul style="list-style-type: none"> • Performance of the facility <i>exceeds</i> expectations as defined before the start of the year in most of these categories: cost of operations, users served, availability, and capability; • The schedule and the costs associated with the ramp-up to steady state operations are <i>less</i> than planned and are acknowledged to be 'leadership caliber' by reviews; • Data on environment, safety, and health continues to be <i>exemplary</i> and widely regarded as among the 'best in class.'
A-	<p>In addition to satisfying all conditions for B+, <i>one</i> of the following conditions is met:</p> <ul style="list-style-type: none"> • Performance of the facility <i>exceeds</i> expectations as defined before the start of the year in any of these categories: cost of operations, users served, availability, and capability; • The schedule and the costs associated with the ramp-up to steady state operations are <i>less</i> than planned and are acknowledged to be among the best by reviews;

Letter Grade	Definition
B ⁺	<p>The Laboratory has achieved each of the following objectives:</p> <ul style="list-style-type: none"> • Performance of the facility <i>meets</i> expectations as defined before the start of the year in all of these categories: cost of operations, users served, availability, capability (for example, beam delivery, luminosity, peak performance, etc), • The schedule and the costs associated with the ramp-up to steady state operations occur as planned; • Data on environment, safety, and health continues to be very good as compared with other projects in the DOE. • User surveys meet program expectations and reflect that the Laboratory is responsive to user needs.
B	The project fails to meet expectations in <i>one</i> of the areas listed under B+.
B-	The project fails to meet expectations in <i>more than one</i> of the areas listed under B+.
C	<p>Performance of the facility fails to meet expectations in <i>many</i> of the areas listed under B+; for example,</p> <ul style="list-style-type: none"> • The cost of operations is unexpectedly high and availability of the facility is unexpectedly low, the number of users is unexpectedly low, capability is well below expectations. • The facility operates at steady state, on cost and on schedule, but the reliability of performance is somewhat below planned values, <u>or</u> the facility operates at steady state, but the associated schedule and costs exceed planned values. • Commitment to environment, safety, and health is satisfactory.
D	<p>Performance of the facility fails to meet expectations in <i>many</i> of the areas listed under B+; for example,</p> <ul style="list-style-type: none"> • The cost of operations is unexpectedly high and availability of the facility is unexpectedly low; capability is well below expectations. • The facility operates somewhat below steady state, on cost and on schedule, and the reliability of performance is somewhat below planned values, <u>or</u> the facility operates at steady state, but the associated schedule and costs exceed planned values. • Commitment to environment, safety, and health is inadequate.
F	<ul style="list-style-type: none"> • The facility fails to operate; the facility operates well below steady state and/or the reliability of the performance is well below planned values. • Laboratory commitment to environment, safety, and health issues is inadequate.

2.4 Utilization of Facility(ies) to Provide Impactful S&T Results and Benefits to External User Communities

In assessing the performance of the Laboratory against this Objective, the following assessment elements should be considered:

- The extent to which the facility is being used to perform influential science;
- The Laboratory's efforts to take full advantage of the facility to generate impactful S&T results;
- The extent to which the facility is strengthened by a resident Laboratory research community that pushes the envelope of what the facility can do and/or are among the scientific leaders of the community;

- The Laboratory's ability to appropriately balance access by internal and external user communities; and
- The extent to which there is a healthy program of outreach to the scientific community.

Score	4.3-4.1	4.0-3.8	3.7-3.5	3.4-3.1	3.0-2.8	2.7-2.5	2.4-2.1	2.0-1.8	1.7-1.1	1.0-0.8	0.7-0
Grade	A+	A	A-	B+	B	B-	C+	C	C-	D	F

Letter Grade	Definition
A+	In addition to meeting all measures under A, <ul style="list-style-type: none"> • The Laboratory took extraordinary means to deliver an extraordinary result for a new user community.
A	In addition to satisfying all conditions for B+; <i>all</i> of the following conditions are met <ul style="list-style-type: none"> • An <i>aggressive</i> outreach programs is in place and has been documented as attracting new communities to the facility; • Reviews consistently find that the facility capability or scope of research potential <i>significantly</i> exceeds expectations for example, due to newly discovered capabilities or exposure to new research communities; OR Reviews find that multiple disciplines are using the facility in new and novel ways that the facility is being used to pursue influential science.
A-	In addition to satisfying all conditions for B+, all of the following conditions are met <ul style="list-style-type: none"> • A <i>strong</i> outreach program is in place; • Reviews find that the facility capability or scope of research potential exceeds expectations for example, due to newly discovered capabilities or exposure to new research communities; OR Reviews document how multiple disciplines are using the facility in new and novel ways and/or that the facility is being used to pursue important science.
B+	The Laboratory has achieved each of the following objectives: <ul style="list-style-type: none"> • Reviews find / validate that the facility is being used for influential science; • The scope of facility capabilities is challenged and broadened by resident users; • The Laboratory effectively manages user allocations; • The Laboratory effectively maintains the facility to required performance standards (for example, runtime, luminosity, etc) • A healthy outreach program is in place.
B	The Laboratory fails to meet expectations in <i>one</i> of the areas listed under B+
B-	The Laboratory fails to meet expectations in <i>several</i> of the areas listed under B+
C	The Laboratory fails to meet expectations in <i>many</i> of the areas listed under B+
D	Reviews find that there are few facility users, few of whom are using the facility in novel ways to produce impactful science; research base is very thin.
F	Laboratory staff does not possess capabilities to operate and/or use the facility adequately.

GOAL 3.0 Provide Effective and Efficient Science and Technology Program Management

The Laboratory provides effective program vision and leadership; strategic planning and development of initiatives; recruits and retains a quality scientific workforce; and provides outstanding research processes, which improve research productivity.

The Provide Effective and Efficient Science and Technology Program Management Goal shall measure the Contractor's overall management in executing S&T programs. Dimensions of program management covered include: 1) providing key competencies to support research programs to include key staffing requirements; 2) providing quality research plans that take into account technical risks, identify actions to mitigate risks; and 3) maintaining effective communications with customers to include providing quality responses to customer needs.

Objectives

3.1 Provide Effective and Efficient Strategic Planning and Stewardship of Scientific Capabilities and Program Vision

In assessing the performance of the Laboratory against this Objective, the following assessment elements should be considered:

- The quality of the Laboratory's strategic plan;
- The extent to which the Laboratory shows strategic vision for research
- The extent to which programs of research take advantage of Laboratory capabilities—research programs are more than the sum of their individual project parts;
- The extent to which the Laboratory undertakes research for which it is uniquely qualified;
- The extent to which lab plans are aligned with DOE mission goals;
- The extent to which the Laboratory programs are balanced between high-/low- risk research for a sustainable program; and
- The extent to which the Laboratory is able to retain and recruit staff for a sustainable program

The following is a sampling of factors to be considered in determining the level of performance for the Laboratory against this Objective. The evaluator(s) may consider the following as measured through progress reports, peer reviews, Field Work Proposals (FWPs), Program Office reviews/oversight, etc.

- Articulation of scientific vision;
- Development and maintenance of core competencies,
- Ability to attract and retain highly qualified staff;
- Efficiency and effectiveness of joint planning (e.g., workshops) with outside community;
- Creativity and robustness of ideas for new facilities and research programs; and
- Willingness to take on high-risk/high payoff/long-term research problems, evidence that the Laboratory "guessed right" in that previous risky decisions proved to be correct and are paying off.
- The depth and breadth of Laboratory research portfolio and its potential for growth.
-

Score	4.3-4.1	4.0-3.8	3.7-3.5	3.4-3.1	3.0-2.8	2.7-2.5	2.4-2.1	2.0-1.8	1.7-1.1	1.0-0.8	0.7-0
Grade	A+	A	A-	B+	B	B-	C+	C	C-	D	F

Letter Grade	Definition
A+	<p>In addition to satisfying the conditions for B+, the execution of the Laboratory's strategic plan has enabled the Laboratory to achieve each of the following:</p> <ul style="list-style-type: none"> • <i>Most</i> of the Laboratory's core competencies are recognized as world leading; • The Laboratory has attracted and retained world-leading scientists in <i>most</i> programs; • There is evidence that previous decisions to pursue high-risk/high-payoff research proved to be correct and are paying off; • The Laboratory has succeeded in developing new core competencies of <i>outstanding</i> quality in areas both exploratory, high-risk research and research that is vital to the DOE/SC missions;
A	<p>In addition to satisfying the conditions for B+, the execution of the Laboratory's strategic plan has enabled the Laboratory to achieve the following:</p> <ul style="list-style-type: none"> • <i>Several</i> of the Laboratory's core competencies are recognized as world leading; • The Laboratory has attracted and retained world-leading scientists in <i>several</i> programs; • There is evidence that previous decisions to pursue high-risk/high-payoff research proved to be correct and are paying off • The Laboratory has succeeded in developing <i>new</i> core competencies of <i>high</i> quality in areas both exploratory, high-risk research and research that is vital to the DOE/SC missions
A-	<p>In addition to satisfying the conditions for B+, the execution of the Laboratory's strategic plan has enabled the Laboratory to achieve at least one of the following:</p> <ul style="list-style-type: none"> • At least one of the Laboratory's core competencies is recognized as <i>world-leading</i>; • The Laboratory has attracted and retained <i>world-leading</i> scientists in one or more programs; • The Laboratory has a coherent plan for addressing future workforce challenges.
B+	<p>The execution of the Laboratory's strategic plan has enabled the Laboratory to achieve each of the following objectives:</p> <ul style="list-style-type: none"> • The Laboratory has articulated a coherent and compelling strategic plan that has been developed with input from external research communities and headquarters guidance, which, where appropriate, includes a coherent plan for building smaller research programs into new core competencies; and reallocates resources away from less effective programs. • The Laboratory has demonstrated the ability to attract and retain professional scientific staff in support of its strategic vision. • The portfolio of Laboratory research balances the needs for both high-risk/ high-payoff research and stewardship of mission-critical research. • The Laboratory's research portfolio takes advantage of unique capabilities at the Laboratory. • The Laboratory's research portfolio includes activities for which the Laboratory is uniquely capable.

Letter Grade	Definition
B	<p>The Laboratory fails to satisfy one of the conditions for B+; for example</p> <ul style="list-style-type: none"> • The Laboratory's strategic plan is only <i>partially</i> coherent and is not entirely well-connected with external communities; • The portfolio of Laboratory research does <i>not</i> appropriately balance high-risk/ high-payoff research and stewardship of mission-critical research; • The Laboratory has developed and maintained <i>some, but not all</i>, of its core competencies. • The plan to attract and retain professional scientific staff is <i>lacking</i> strategic vision.
B-	<p>The Laboratory fails to satisfy <i>several</i> of the conditions for B+, including at least one of the following:</p> <ul style="list-style-type: none"> • Weak programmatic vision insufficiently connected with external communities; • Development and maintenance of only a few core competencies • little attention to maintaining the correct balance between high-risk and mission-critical research; • inability to attract and retain talented scientists in some programs.
C	<p>The Laboratory fails to satisfy <i>several</i> of the conditions for B+, including at least one of the following reasons:</p> <ul style="list-style-type: none"> • The Laboratory's strategic plan lacks strategic vision and lacks appropriate coordination with appropriate stakeholders including external research groups. • The Laboratory's strategic plan does not provide for sufficient maintenance of core competencies • Plan to attract and retain professional scientific staff is unlikely to be successful or does not focus on strategic capabilities.
D	<p>The Laboratory fails to satisfy <i>several</i> of the conditions for B+, and specifically</p> <ul style="list-style-type: none"> • The Laboratory has demonstrated little effort in developing a strategic plan. • The Laboratory has done little to develop and maintain core competencies • The Laboratory has had minimal success in attracting and retaining professional scientific staff.
F	<p>The Laboratory has:</p> <ul style="list-style-type: none"> • Made limited or ineffective attempts to develop a strategic plan; • Not demonstrated the ability to develop and maintain core competencies, has failed to propose high-risk/high-reward research and has failed to steward mission-critical areas; • Failed to attract even reasonably competent scientists and technical staff.

3.2 Provide Effective and Efficient Science and Technology Project/Program/Facilities Management

In assessing the performance of the Laboratory against this Objective, the following assessment elements should be considered:

- The Laboratory's management of R&D programs and facilities according to proposed plans;
- The extent to which the Laboratory's management of projects/programs/facilities supports the Laboratory strategic plan
- Adequacy of the Laboratory's consideration of technical risks;
- The extent to which the Laboratory is successful in identifying/avoiding technical problems;

- Effectiveness in leveraging across multiple areas of research and between research and facility capabilities;
- The extent to which the Laboratory demonstrates a willingness to make tough decisions (i.e., cut programs with sub-critical mass of expertise, divert resources to more promising areas, etc.); and
- The use of LDRD and other Laboratory investments and overhead funds to improve the competitiveness of the Laboratory.

The following is a sampling of factors to be considered in determining the level of performance for the Laboratory against this Objective. The evaluator(s) may consider the following as measured through progress reports, peer reviews, Field Work Proposals (FWPs), Program Office reviews/oversight, etc.

- Laboratory plans that are reviewed by experts outside of lab management and/or include broadly-based input from within the Laboratory.
-

Score	4.3-4.1	4.0-3.8	3.7-3.5	3.4-3.1	3.0-2.8	2.7-2.5	2.4-2.1	2.0-1.8	1.7-1.1	1.0-0.8	0.7-0
Grade	A+	A	A-	B+	B	B-	C+	C	C-	D	F

Letter Grade	Definition
A+	In addition to meeting the all expectations under A, <ul style="list-style-type: none"> • The Laboratory has taken extraordinary measures to deliver an extraordinary result of critical importance to DOE missions, which could include the delivery of a critical technology or insight in response to a National emergency
A	In addition to satisfying the conditions for B+, <ul style="list-style-type: none"> • The Laboratory's implementation of project/program/facility plans has led directly to effective R&D programs/facility operations that exceed program expectations in <i>several</i> programmatic areas. Examples are listed under A-.

Letter Grade	Definition
A-	<p>In addition to satisfying the conditions for B+,</p> <ul style="list-style-type: none"> • The Laboratory's implementation of project/program/facility plans has led directly to effective R&D programs/facility operations that exceed program expectations in <i>more than one</i> programmatic area. Examples of performance that exceeds expectations include: • The Laboratory's implementation of project/program/facility plans has led directly to significant cost savings and/or significantly higher productivity than expected; • Project/program/facility plans prove to be robust against changing scientific and fiscal conditions through contingency planning; • The Laboratory has demonstrated creativity and forceful leadership in development and/or proactive management of its project/program/facility plans to reduce or eliminate risk; • The Laboratory's proposals for new initiatives are funded through reallocation of resources from less effective programs. • Research plans and management actions are proactive, not reactive, as evidenced by making hard decisions and taking strong actions; and • Management is prepared for budget fluctuations and changes in DOE program priorities – multiple contingencies are planned for; and • LDRD investments, overhead funds, and other Laboratory funds are used to strengthen lab plans and fill critical gaps in the Laboratory portfolio enabling it to respond to future DOE initiatives and/or national emergencies;
B ⁺	<p>The Laboratory has achieved each of the following objectives:</p> <ul style="list-style-type: none"> • Project/program/facility plans exist for all major projects/programs/facilities. • Project/program/facility plans are consistent with known budgets, are based on reasonable assessments of technical risk, are well-aligned with DOE interests, provide sufficient flexibility to respond to unforeseen directives and opportunities, and effectively leverage other Laboratory resources and expertise. • The Laboratory has implemented the project/program/facility plans and has effective methods of tracking progress. • The Laboratory demonstrates willingness to make tough decisions (i.e., cut programs with sub-critical mass of expertise, divert resources to more promising areas, etc.). • The Laboratory's implementation of project/program/facility plans has led directly to effective R&D programs/facility operations. • LDRD investments and other overhead funds are managed appropriately.
B	<ul style="list-style-type: none"> • Project/program/facility plans exist for all major projects/programs/facilities. • The Laboratory has implemented the project/program/facility plans. <p>BUT the Laboratory fails to meet <i>at least one of</i> the conditions for B+.</p>
B-	<ul style="list-style-type: none"> • Project/program/facility plans exist for all major projects/programs/facilities. • The Laboratory has implemented the project/program/facility plans. <p>BUT the Laboratory fails to meet <i>several of</i> the conditions for B+.</p>
C	<ul style="list-style-type: none"> • Project/program/facility plans exist for most major projects/programs/facilities. <p>BUT the Laboratory has failed to implement the project/program/facility plans AND the Laboratory fails to meet <i>several of</i> the conditions for B+.</p>

Letter Grade	Definition
D	<ul style="list-style-type: none"> Project/program/facility plans do not exist for a significant fraction of the Laboratory's major projects/programs/facilities; OR Significant work at the Laboratory is not in alignment with the project/program/facility plans
F	The Laboratory has failed to conduct project/program/facility planning activities.

3.3 Provide Efficient and Effective Communications and Responsiveness to Headquarters Needs

In assessing the performance of the Laboratory against this Objective, the following assessment elements should be considered:

- The quality, accuracy and timeliness of the Laboratory's response to customer requests for information;
- The extent to which the Laboratory provides point-of-contact resources and maintains effective internal communications hierarchies to facilitate efficient determination of the appropriate point-of-contact for a given issue or program element;
- The effectiveness of the Laboratory's communications and depth of responsiveness under extraordinary or critical circumstances; and
- The effectiveness of Laboratory management in accentuating the importance of communication and responsiveness.

Score	4.3-4.1	4.0-3.8	3.7-3.5	3.4-3.1	3.0-2.8	2.7-2.5	2.4-2.1	2.0-1.8	1.7-1.1	1.0-0.8	0.7-0
Grade	A+	A	A-	B+	B	B-	C+	C	C-	D	F

Letter Grade	Definition
A+	<p>In addition to meeting the all expectations under A,</p> <ul style="list-style-type: none"> The Laboratory's effective communication and extraordinary responsiveness in the face of extreme situations or a national emergency had a materially positive impact on the outcome of the event and/or DOE mission objectives
A	<p>In addition to satisfying the conditions for B+, the Laboratory also meets all of the following:</p> <ul style="list-style-type: none"> Laboratory management has instilled a culture throughout the lab that emphasizes good communication practices; Communication channels are well-defined and information is effectively conveyed; Responses to HQ requests for information from all Laboratory representatives are prompt, thorough, correct and succinct; important or critical information is delivered in real-time; Laboratory representatives <i>always</i> initiate a communication with HQ on emerging Laboratory issues; headquarters is never surprised to learn of emerging Laboratory issues through outside channels.

Letter Grade	Definition
A-	<p>In addition to satisfying the conditions for B+,</p> <ul style="list-style-type: none"> • Laboratory management has instilled a culture throughout the lab that emphasizes good communication practices; and • Responses to requests for information are prompt, thorough, and economical/succinct at all levels of interaction; • Laboratory representatives <i>often</i> initiate communication with HQ on emerging Laboratory issues; • under critical circumstances, essential information is delivered in real-time
B ⁺	<p>The Laboratory has achieved each of the following objectives:</p> <ul style="list-style-type: none"> • Staff throughout the Laboratory organization engage in good communication practices; • Responses to requests for information are prompt and thorough; • The accuracy and integrity of the information provided is never in doubt; • Up-to-date point-of-contact information is widely available for all programmatic areas; • Headquarters is always and promptly informed of both positive and negative events at the Laboratory
B	The Laboratory failed to meet the conditions for B+ <i>in a few instances</i>
B-	<p>The Laboratory fails to meet the conditions for B+ for <i>one</i> of the following reasons:</p> <ul style="list-style-type: none"> • Responses to requests for information do not provide the minimum requirements to meet HQ needs; While the integrity of the information provided is never in doubt, its accuracy sometimes is; • Laboratory representatives do not take the initiative to alert HQ to emerging Laboratory issues.
C	<p>The Laboratory fails to meet the conditions for B+ for <i>one or more</i> of the following reasons:</p> <ul style="list-style-type: none"> • Responses to requests for information frequently fail to provide the minimum requirements to meet HQ needs • The Laboratory used outside channels or circumvented HQ in conveying critical information; • The integrity and/or accuracy of information provided is sometimes in doubt; • Laboratory management fails to demonstrate that its employees are held accountable for ensuring effective communication and responsiveness; • Laboratory representatives failed to alert HQ to emerging Laboratory issues.
D	<p>The Laboratory fails to meet the conditions for B+ for one of the following reasons:</p> <ul style="list-style-type: none"> • Laboratory staff are generally well-intentioned in communication but consistently ineffective and/or incompetent; • The Laboratory management fails to emphasize the importance of effective communication and responsiveness
F	<p>The Laboratory fails to meet the conditions for B+ for one of the following reasons</p> <ul style="list-style-type: none"> • Laboratory staff are openly hostile and/or non-responsive to requests for information – emails and phone calls are consistently ignored; • Responses to requests for information are consistently incorrect, inaccurate or fraudulent – information is not organized, is incomplete, or is fabricated.